

In the conditions found here it may be too that we have a suggestion as to the possible origin of sportive hypertrophy and other growth mutations.

#### BACILLUS LEPRÆ IN COLD-BLOODED ANIMALS.

Couret (Jour. Exp. Med., May, 1911) reports inoculating tadpoles, fishes, turtles, etc., with *Bacillus lepræ*. Quite in contrast with the common result in warm-blooded animals, which are highly refractory to this Bacillus, the cold-blooded vertebrates show great receptiveness to the germs. The Bacilli multiply readily in any of these hosts and may occur generally among the cells or be localized in the large, so-called "lepra-cells" which they are supposed to invade. The fish, etc., show no lesions or other external signs of their infection. Dr. Couret believes that the evidence of fish being the source of human infection by this disease is highly strengthened by these results.

#### "GIANT CELLS" IN TUMORS.

Mallory (Jour. Med. Research, April, 1911) finds at least two types of giant cells in tumors. One results from multiple mitosis and rapid growth. These are the true giant cells and are found in different kinds of tumors. The second type are not indigenous tumor cells at all; but are formed by the coalescence of a number of invading endothelial leucocytes. They should not therefore give the names to tumors (e. g. "giant-cell sarcoma").

#### EPITHELIAL FIBRILS AND BRIDGES.

In Arch. Mikr. Anat., 1910, p. 659, Rosenstadt gives an account of studies on the epidermis of different animals, both adult and embryonic. He finds that the fibrils common to epidermal cytoplasm run longitudinally, transversely, and vertically (i. e., perpendicular to the exposed surface). In each of the three directions fibres pass across the intercellular spaces, giving continuous protoplasmic connection among the cells. In epithelia that produce cilia on the free surface, similar fibrils extend into the cilia.